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RAW SEQUENCE LISTING

DATE: 04/26/2002

PATENT APPLICATION: US/09/902,525

TIME: 14:28:57

Input Set : N:\Crif3\RULE60\09902525.raw

Output Set: N:\CRF3\04262002\I902525.raw

SEQUENCE LISTING

1 (1) GENERAL INFORMATION:

- 2 (i) APPLICANT: Recombinant Biocatalysis, Inc.
- 3 (ii) TITLE OF INVENTION: THERMOSTABLE PHOSPHATASES
- 4 (iii) NUMBER OF SEQUENCES: 54
- 5 (iv) CORRESPONDENCE ADDRESS:
- 6 (A) ADDRESSEE: Fish & Richardson P.C.
- 7 (B) STREET: 4225 Executive Square, Suite 1400
- 8 (C) CITY: La Jolla
- 9 (D) STATE: CA
- 10 (E) COUNTRY: USA
- 11 (F) ZIP: 92037

ENTERED

12 (v) COMPUTER READABLE FORM:

- 13 (A) MEDIUM TYPE: Diskette
- 14 (B) COMPUTER: IBM Compatible
- 15 (C) OPERATING SYSTEM: Windows 95
- 16 (D) SOFTWARE: FastSEQ for Windows Version 2.0b

17 (vi) CURRENT APPLICATION DATA:

- C--> 18 (A) APPLICATION NUMBER: US/09/902,525
- C--> 19 (B) FILING DATE: 09-Jul-2001
- 20 (C) CLASSIFICATION:

21 (vii) PRIOR APPLICATION DATA:

- 22 (A) APPLICATION NUMBER: US/09/202,681A
- 23 (B) FILING DATE: 23-Dec-1999
- 25 (A) APPLICATION NUMBER: 08/666,857
- 26 (B) FILING DATE: 19-JUN-1996
- 27 (A) APPLICATION NUMBER: 60/033,752
- 28 (B) FILING DATE: 19-JUN-1997

29 (viii) ATTORNEY/AGENT INFORMATION:

- 30 (A) NAME: Haile, Ph.D., Lisa A.
- 31 (B) REGISTRATION NUMBER: 38,347
- 32 (C) REFERENCE/DOCKET NUMBER: 09010/015W01

33 (ix) TELECOMMUNICATION INFORMATION:

- 34 (A) TELEPHONE: 619/678-5070
- 35 (B) TELEFAX: 619/678-5099
- 36 (C) TELEX:

37 (2) INFORMATION FOR SEQ ID NO: 1:

38 (i) SEQUENCE CHARACTERISTICS:

- 39 (A) LENGTH: 52 base pairs
- 40 (B) TYPE: nucleic acid
- 41 (C) STRANDEDNESS: single
- 42 (D) TOPOLOGY: linear

43 (ii) MOLECULE TYPE: cDNA

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44      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
45      CCGAGAATTC ATTAAAGAGG AGAAATTAAC TATGGGGGCA GGTCCGAAAA GG      52
47 (2) INFORMATION FOR SEQ ID NO: 2:
48      (i) SEQUENCE CHARACTERISTICS:
49          (A) LENGTH: 31 base pairs
50          (B) TYPE: nucleic acid
51          (C) STRANDEDNESS: single
52          (D) TOPOLOGY: linear
53      (ii) MOLECULE TYPE: cDNA
54      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
55      CCGAGGATCC TCACCGCCCC CTGCGGGTGC G      31
57 (2) INFORMATION FOR SEQ ID NO: 3:
58      (i) SEQUENCE CHARACTERISTICS:
59          (A) LENGTH: 52 base pairs
60          (B) TYPE: nucleic acid
61          (C) STRANDEDNESS: single
62          (D) TOPOLOGY: linear
63      (ii) MOLECULE TYPE: cDNA
64      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
65      CCGAGAATTC ATTAAAGAGG AGAAATTAAC TATGTTGGAT ATACTGCTTG TT      52
67 (2) INFORMATION FOR SEQ ID NO: 4:
68      (i) SEQUENCE CHARACTERISTICS:
69          (A) LENGTH: 32 base pairs
70          (B) TYPE: nucleic acid
71          (C) STRANDEDNESS: single
72          (D) TOPOLOGY: linear
73      (ii) MOLECULE TYPE: cDNA
74      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
75      CCGACGATCC TTATTTTTTA ACCAAATGTT CC      32
77 (2) INFORMATION FOR SEQ ID NO: 5:
78      (i) SEQUENCE CHARACTERISTICS:
79          (A) LENGTH: 52 base pairs
80          (B) TYPE: nucleic acid
81          (C) STRANDEDNESS: single
82          (D) TOPOLOGY: linear
83      (ii) MOLECULE TYPE: cDNA
84      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
85      CCGACAATTG ATTAAAGAGG AGAAATTAAC TATGATGATG GAATTCACTC GC      52
87 (2) INFORMATION FOR SEQ ID NO: 6:
88      (i) SEQUENCE CHARACTERISTICS:
89          (A) LENGTH: 32 base pairs
90          (B) TYPE: nucleic acid
91          (C) STRANDEDNESS: single
92          (D) TOPOLOGY: linear
93      (ii) MOLECULE TYPE: cDNA
94      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
95      CGGAGGATCC CTACAGTTCT AAAAGTCTTT TA      32
97 (2) INFORMATION FOR SEQ ID NO: 7:
98      (i) SEQUENCE CHARACTERISTICS:

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99      (A) LENGTH: 52 base pairs
100     (B) TYPE: nucleic acid
101     (C) STRANDEDNESS: single
102     (D) TOPOLOGY: linear
103     (ii) MOLECULE TYPE: cDNA
104     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
105      CCGACAATTG ATTAAAGAGG AGAAATTAAC TATGAGAACC CTGACAATAA AC      52
107 (2) INFORMATION FOR SEQ ID NO: 8:
108     (i) SEQUENCE CHARACTERISTICS:
109         (A) LENGTH: 31 base pairs
110         (B) TYPE: nucleic acid
111         (C) STRANDEDNESS: single
112         (D) TOPOLOGY: linear
113     (ii) MOLECULE TYPE: cDNA
114     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
115      CCGAGGATCC TTACACCCAC AGAACCCCTTA C      31
117 (2) INFORMATION FOR SEQ ID NO: 9:
118     (i) SEQUENCE CHARACTERISTICS:
119         (A) LENGTH: 52 base pairs
120         (B) TYPE: nucleic acid
121         (C) STRANDEDNESS: single
122         (D) TOPOLOGY: linear
123     (ii) MOLECULE TYPE: cDNA
124     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
125      CCGAGAATTC ATTAAAGAGG AGAAATTAAC TATGAAAGGA AAGTCTCTTG TT      52
127 (2) INFORMATION FOR SEQ ID NO: 10:
128     (i) SEQUENCE CHARACTERISTICS:
129         (A) LENGTH: 31 base pairs
130         (B) TYPE: nucleic acid
131         (C) STRANDEDNESS: single
132         (D) TOPOLOGY: linear
133     (ii) MOLECULE TYPE: cDNA
134     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
135      CCGAGGATCC TCAAGCTTCC TGGAGAATCA A      31
137 (2) INFORMATION FOR SEQ ID NO: 11:
138     (i) SEQUENCE CHARACTERISTICS:
139         (A) LENGTH: 52 base pairs
140         (B) TYPE: nucleic acid
141         (C) STRANDEDNESS: single
142         (D) TOPOLOGY: linear
143     (ii) MOLECULE TYPE: cDNA
144     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
145      CCGAGAATTC ATTAAAGAGG AGAAATTAAC TATGCCAAGA AATATCGCCG CT      52
147 (2) INFORMATION FOR SEQ ID NO: 12:
148     (i) SEQUENCE CHARACTERISTICS:
149         (A) LENGTH: 34 base pairs
150         (B) TYPE: nucleic acid
151         (C) STRANDEDNESS: single
152         (D) TOPOLOGY: linear

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RAW SEQUENCE LISTING

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153      (ii) MOLECULE TYPE: cDNA
154      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
155          CCGAGGATCC TTAAGGCTTC TCGAGGTGGG GGTT                                     34
157 (2) INFORMATION FOR SEQ ID NO: 13:
158      (i) SEQUENCE CHARACTERISTICS:
159          (A) LENGTH: 54 base pairs
160          (B) TYPE: nucleic acid
161          (C) STRANDEDNESS: single
162          (D) TOPOLOGY: linear
163      (ii) MOLECULE TYPE: cDNA
164      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
165          CCGACAATTG ATTAAAGAGG AGAAATTAAC TATGTATAAA TGGATTATTG AGGG                                     54
167 (2) INFORMATION FOR SEQ ID NO: 14:
168      (i) SEQUENCE CHARACTERISTICS:
169          (A) LENGTH: 31 base pairs
170          (B) TYPE: nucleic acid
171          (C) STRANDEDNESS: single
172          (D) TOPOLOGY: linear
173      (ii) MOLECULE TYPE: cDNA
174      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
175          CCGAGGACTA AACATAGTCT AAGTAATTAG C                                     31
177 (2) INFORMATION FOR SEQ ID NO: 15:
178      (i) SEQUENCE CHARACTERISTICS:
179          (A) LENGTH: 52 base pairs
180          (B) TYPE: nucleic acid
181          (C) STRANDEDNESS: single
182          (D) TOPOLOGY: linear
183      (ii) MOLECULE TYPE: cDNA
184      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
185          CCGAGAATTC ATTAAAGAGG AGAAATTAAC TATGAGAATC CTCCTCACCA AC                                     52
187 (2) INFORMATION FOR SEQ ID NO: 16:
188      (i) SEQUENCE CHARACTERISTICS:
189          (A) LENGTH: 31 base pairs
190          (B) TYPE: nucleic acid
191          (C) STRANDEDNESS: single
192          (D) TOPOLOGY: linear
193      (ii) MOLECULE TYPE: cDNA
194      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
195          CCGAGGATCC TCACAGGCTC AGAAGCCTTT G                                     31
197 (2) INFORMATION FOR SEQ ID NO: 17:
198      (i) SEQUENCE CHARACTERISTICS:
199          (A) LENGTH: 54 base pairs
200          (B) TYPE: nucleic acid
201          (C) STRANDEDNESS: single
202          (D) TOPOLOGY: linear
203      (ii) MOLECULE TYPE: Genomic DNA
204      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
205          CCGAGAATTC ATTAAAGAGG AGAAATTAAC TATGGAAAAC TTAAAAAAGT ACCT                                     54
207 (2) INFORMATION FOR SEQ ID NO: 18:

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RAW SEQUENCE LISTING

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PATENT APPLICATION: US/09/902,525

TIME: 14:28:57

Input Set : N:\Crf3\RULE60\09902525.raw

Output Set: N:\CRF3\04262002\I902525.raw

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208      (i) SEQUENCE CHARACTERISTICS:
209          (A) LENGTH: 31 base pairs
210          (B) TYPE: nucleic acid
211          (C) STRANDEDNESS: single
212          (D) TOPOLOGY: linear
213      (ii) MOLECULE TYPE: cDNA
214      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
215          CCGAGGATCC TCACCGCCCC CTGCGGGTGC G      31
217 (2) INFORMATION FOR SEQ ID NO: 19:
218      (i) SEQUENCE CHARACTERISTICS:
219          (A) LENGTH: 783 base pairs
220          (B) TYPE: nucleic acid
221          (C) STRANDEDNESS: single
222          (D) TOPOLOGY: linear
223      (ii) MOLECULE TYPE: Genomic DNA
224      (ix) FEATURE:
225          (A) NAME/KEY: Coding Sequence
226          (B) LOCATION: 1...780
227      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
228          ATG AGG GGG AGC GGA GTG CGG ATA CTT CTC ACC AAC GAT GAC GGC ATC      48
229          Met Arg Gly Ser Gly Val Arg Ile Leu Leu Thr Asn Asp Asp Gly Ile
230              1          5          10          15
231          TTT GCC GAG GGT CTG GGG GCT CTG CGC AAG ATG CTG GAG CCC GTG GCT      96
232          Phe Ala Glu Gly Leu Gly Ala Leu Arg Lys Met Leu Glu Pro Val Ala
233              20          25          30
234          ACC CTT TAC GTG GTG GCT CCG GAC CGA GAG CGT AGC GCG GCC AGC CAT      144
235          Thr Leu Tyr Val Val Ala Pro Asp Arg Glu Arg Ser Ala Ala Ser His
236              35          40          45
237          GCT ATC ACC GTT CAC CGC CCC CTG CGG GTG CGG GAG GCG GGT TTT CGC      192
238          Ala Ile Thr Val His Arg Pro Leu Arg Val Arg Glu Ala Gly Phe Arg
239              50          55          60
240          AGC CCC AGG CTT AAA GGC TGG GTA GTG GAC GGT ACC CCG GCC GAC TGC      240
241          Ser Pro Arg Leu Lys Gly Trp Val Val Asp Gly Thr Pro Ala Asp Cys
242              65          70          75          80
243          GTC AAG CTG GGC CTG GAG GTA CTT TTG CCC GAA CGT CCA GAT TTC CTG      288
244          Val Lys Leu Gly Leu Glu Val Leu Leu Pro Glu Arg Pro Asp Phe Leu
245              85          90          95
246          GTT TCG GGC ATA AAC TAC GGG CCC AAC CTG GGT ACC GAC GTA CTT TAC      336
247          Val Ser Gly Ile Asn Tyr Gly Pro Asn Leu Gly Thr Asp Val Leu Tyr
248              100          105          110
249          TCC GGC ACC GTC TCG GCG GCC ATA GAA GGG GTA ATT AAC GGC ATT CCC      384
250          Ser Gly Thr Val Ser Ala Ala Ile Glu Gly Val Ile Asn Gly Ile Pro
251              115          120          125
252          TCG GTG GCC GTA TCT TTG GCC ACG CGG CGG GAG CCG GAC TAT ACC TGG      432
253          Ser Val Ala Val Ser Leu Ala Thr Arg Arg Glu Pro Asp Tyr Thr Trp
254              130          135          140
255          GCG GCC CGG TTC GTC CTG GTC CTG CTG GAG GAA CTG CGA AAA CAC CAA      480
256          Ala Ala Arg Phe Val Leu Val Leu Leu Glu Leu Arg Lys His Gln
257              145          150          155          160

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/902,525

DATE: 04/26/2002

TIME: 14:28:58

Input Set : N:\Crif3\RULE60\09902525.raw

Output Set: N:\CRF3\04262002\I902525.raw

L:18 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:19 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]